

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

October 12, 2017

Stephen Hurly President and Chief Executive Officer Eleven Biotherapeutics, Inc. 245 First Street, Suite 1800 Cambridge, MA 02142

> Re: Eleven Biotherapeutics, Inc. Registration Statement on Form S-1 Filed October 4, 2017 File No. 333-220809

Dear Mr. Hurly:

We have limited our review of your registration statement to those issues we have addressed in our comment.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments.

Form S-1 Filed October 4, 2017

Incorporation by Reference, page 24

1. Please incorporate by reference your definitive proxy statement filed April 4, 2017. Please refer to Item 12(a)(2) of Form S-1 for guidance.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Stephen Hurly Eleven Biotherapeutics, Inc. October 12, 2017 Page 2

Please contact Jeffrey Gabor at 202-551-2544 or Erin Jaskot at 202-551-3442 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Steven J. Abrams